

## Audit Partner-Manager Dyadic Fit and Audit Team Functioning

Lena Pieper, Murray Barrick, Olof Bik, Jere R. Francis, Ann Vanstraelen

Project Number: 2019E01

# **Audit Partner-Manager Dyadic Fit and Audit Team Functioning\***

by

Lena Pieper  
Maastricht University, the Netherlands

Murray Barrick  
Texas A&M University, USA

Olof Bik  
University of Groningen, the Netherlands

Jere R. Francis  
Maastricht University, the Netherlands

Ann Vanstraelen  
Maastricht University, the Netherlands

Draft Date: August 2023

## **Abstract:**

This paper investigates the formation of audit partner-manager pairings (dyads) and the consequences of this formation on the functioning of the engagement team. Prior literature mainly focuses on the role of one leader alone, while in practice, an audit team is usually led by two key figures. This dual-leadership structure and its potential effect on the team are largely unexplored. We draw on the theory of homophily to develop predictions, and test them using data from 221 engagement teams and their leaders. The analyses suggest that partners and managers that form a dyad are more similar in terms of their skills and leadership behavior than other random matches based on the available pool of auditors. However, the similarity is not necessarily beneficial for the functioning of the engagement team. Only when the partner and manager are both highly skilled and demonstrate strong leadership does the similarity result in a better functioning team. Otherwise, a complementary match is associated with better team dynamics. The findings on the role of partner-manager dyads in guiding an engagement team can inform audit firms on how to better compose and manage their audit teams.

**Keywords:** Audit Teams, Leadership, Audit Quality, Audit Team Dynamics

**JEL Classification:** M40; M42

\* We thank the Foundation for Auditing Research (FAR) for Grant 2019E01 which facilitated this project. We also thank participants in the surveys and the 10 audit firms that provided archival data for the research. The views expressed in this report are those of the authors and not necessarily those of the Foundation or the firms in the study. We also appreciate the comments of Keval Amin, Wim Gijsselaers, Anna Gold, Kris Hardies, Frank Moers, Roger Meuwissen, Mark Peecher, and participants at the FAR Seminar “Audit Culture and Beyond,” the 2022 EIASM Audit Quality Workshop, and the 2023 Auditing Midyear Meeting of the American Accounting Association.

## I. INTRODUCTION

This paper examines how different audit partner-manager combinations, or dyads, influence the functioning of an audit engagement team. Standard-setters emphasize the leadership responsibilities for managing and achieving quality on the audit engagement, which includes direction and supervision of the members of the engagement team, and review of their work (e.g., ISA 220, PCAOB AS 1201). While the engagement partner takes overall responsibility for the audit engagement quality and signs the audit opinion, we know from practice that it is the “subteam” of partners and managers that form the audit team leadership (e.g., Cameran, Ditillo, & Pettinicchio, 2018). This dual leadership structure is the focus of this study. Prior research on audit engagement teams mainly focuses on the role of one leader alone and identifies different conditions that improve team functioning, including audit team composition (e.g., Hossain, Yazawa, & Monroe, 2017; Cameran et al. 2018), and team climate (e.g., Gissel & Johnstone, 2017; Gold, Gronewold, & Salterio, 2014). However, the dual leadership structure and its potential effect on the dynamics of the audit engagement team and team performance are largely unexplored. We contribute to the literature by investigating the formation of audit partner-manager dyads and the consequences of this formation on the functioning of the engagement team.

We use the theory of homophily from the sociology literature to inform our predictions. Homophily describes an individual's natural tendency to associate with similar others (McPherson, Smith-Lovin, & Cook, 2001), and evidence of this pattern has been documented in all types of relationships, ranging from marital relations and close friendships to work relationships and other loose connections (Ertug, Brennecke, Kovács, & Zou, 2022; McPherson et al., 2001). Following homophily theory, we expect that audit partner-manager dyads are more likely formed among individuals with similar skills (technical and commercial) and leadership behaviors, while controlling for similarity in demographic factors. We focus on

leadership, technical and commercial skills because these are described by audit firms as key competencies of their partners and managers.

To test our predictions, we collect data via two consecutive surveys from the ten largest audit firms in the Netherlands, including the Big 4. In one survey, team members ( $n = 2,336$ ) assess the skills and leadership behavior of the partner and manager. In the second survey ( $n = 1,287$ ), the team members self-assess the functioning of the engagement team.

For our first analysis, examining the dyad formation, we create a sample of all partner-manager dyads that *could* have occurred ex ante. We then model the *actual dyads* as a function of the dyad members' similarity in skills and leadership behavior. Consistent with the theory of homophily, the results of this model suggest that the formed audit partner-manager dyads are more similar in terms of their skills and leadership behavior than the random pairs composed from the available pool. Interestingly, this pattern holds both for dyads with managers self-selected by the partner (68%) and for dyads with managers centrally assigned to the partner (32%).

Next, we examine how the dyadic fit influences the functioning of the team. Dual-leadership structures require coordination and cooperation between the two leaders to manage the team effectively. Similarity can facilitate cooperation by increasing communication (Reagans, 2005) and trust (Ahlf, Horak, Klein, & Yoon, 2019) and establishing a shared understanding (Downar, Ernstberger, & Koch, 2021) between the members of the dyad. This suggests that dyad similarity might positively influence the team. However, similarity can also result in biased decision-making (e.g., Ertug et al., 2022; Janis, 2008). In line with attribute substitution theory (Tversky & Kahneman, 1974), dyad members could rely too heavily on their (perceived) similarity rather than on their underlying abilities. In addition, while increased similarity can improve the communication between the dyad members, it might not automatically translate into a better functioning team if the leaders do not know how to

communicate with other team members. Thus, the direction of the relationship between the dyadic fit and team functioning is not clear *ex ante*. We find that similarity is not always beneficial for the functioning of the engagement team. It is only when the partner and manager are both highly skilled and demonstrate strong leadership that the similarity results in better audit team performance and audit team dynamics (psychological safety, team commitment, team identity). The analysis also indicates that a strong manager (partner) can compensate a weak partner (manager). The compensation effect is most pronounced for strong managers compensating for weak partners, which suggests that managers play a central role in dyadic performance and the functioning of the team.

In an additional analysis, we explore whether one dyad member influences the functioning of the team more strongly. The results highlight that it is not one leader alone but both the partner and manager who influence the team jointly. While the partner seems to matter more for psychological safety and team identity, the manager's influence is largest for team commitment and team performance. These findings further underscore the relevance of considering the dual-leadership structure.

Collectively, our results contribute to the growing literature on the functioning of audit teams and are relevant to audit practice. We provide novel insights on the role of audit partner-manager dyads who jointly lead the audit team. To date, prior literature has primarily focused on the role of one leader alone, which left the specifics of the dual-leadership structure in an audit largely unexplored. Our work addresses this gap. A related study by Downar et al. (2021) uses a German setting to study the dyad relation between a lead engagement auditor and a concurring review auditor. Our study is different for two main reasons. First, we focus on the dyad that is most central to the engagement team and where both dyad members supervise the engagement team. In contrast, a concurring auditor is tasked with reviewing the work of lead auditors and is not typically involved in any supervision of the team. Second, we extend the

findings by Downar et al. (2021) by considering how similarity in skills and leadership behavior, rather than demographic factors alone, affects the formation of a dyad.

Our findings have major implications for how audit firms manage their audit teams and, specifically, the composition of the partner-manager dyad. Audit partners are often given the choice of which manager they want to work with (in our sample, in 68 percent of the cases). Understanding the consequences of that choice is important to the audit firm's goal of achieving consistent outcomes across engagements. Our study informs audit firms with insights on how different dyad combinations can enhance the functioning of the team, which can ultimately improve both audit effectiveness and efficiency.

The remainder of the paper is organized as follows. Section 2 reviews prior literature and develops the hypotheses. Section 3 details the sample and data collection process. Section 4 presents our research design and results for the first hypothesis, and Section 5 presents the research design and results for the second hypothesis. Section 6 includes an additional analysis, and Section 7 discusses the implications of our findings.

## **II. BACKGROUND AND HYPOTHESES DEVELOPMENT**

### **Background**

A financial statement audit is conducted by an engagement team. Audit teams are hierarchical and fluid in nature, and a 'typical' audit team consists of an audit partner, engagement manager, and audit staff (e.g., assistant managers, senior associates, junior staff). To achieve the goal of completing a high-quality audit, it is important that the audit team functions well together and is supervised properly. The auditing standards (e.g., PCAOB AS 10 and ISA 220) also recognize the role of the engagement team and the significance of proper supervision.

Prior studies that investigate audit teams are mostly experiments, both lab and field experiments (e.g., Dennis & Johnstone, 2018; Gissel & Johnstone, 2017; Jiambalvo & Pratt,

1982; Kadous, Proell, Rich, & Zhou, 2019; Nelson et al., 2016; Proell, Zhou, & Nelson, 2022). These studies focus on identifying different conditions under which team communication, members' voice behavior, and ultimately team performance and audit quality improves.

An initial key input for the functioning of any team is the team's composition (Morgeson, DeRue, & Karam, 2010). Hossain et al. (2017) and Cameran et al. (2018) examine how an audit team's composition affects audit outcomes, such as audit fees, audit efficiency, and audit quality. The two studies also find that audit quality is associated with the diversity in audit teams, measured as the mix of work assigned to different function levels. Cameran et al. (2018) further consider the proportion of female auditors within a team and find that audit quality and efficiency increase with the proportion of female auditors.

Following the team formation, the team moves into an action phase in which the actual audit work is performed. As staff auditors collect most of the audit evidence, it is important that they work in an audit team in which they feel safe to speak, raise issues (Gissel & Johnstone, 2017; Nelson et al., 2016), and make mistakes (Gold et al., 2014). Several studies focus on the role of the team leader in ensuring such a team climate. For example, Nelson et al. (2016) provide evidence that a leader's team orientation, i.e., the degree to which the leader "emphasizes collective group identity and team accomplishment rather than individual identity and accomplishment" (Nelson et al., 2016, p. 1785), positively affects junior auditor's willingness to raise audit issues. In line with this finding, Gissel and Johnstone (2017) show that when the audit partner's communication emphasizes psychological safety, audit team members are more willing to share private information, resulting in a higher quality fraud brainstorming session.

Overall, prior research establishes that the audit team is important for achieving high quality, and the studies emphasize that team leaders play a key role in ensuring the functioning of a team, including establishing a safe team environment. These studies focus on the

relationship between individual leaders and team members, such as the relationship between the partner and the team or between the senior in charge and the team. However, we know from practice that an audit engagement team is usually led by two key figures: the lead engagement partner and an engagement manager. While the partner has the ultimate responsibility for the engagement and supervision of the team, she normally delegates part of this responsibility to a (senior) manager. The manager is more involved in the day-to-day supervision of the team and is in regular contact with the partner.

The specifics of this dual-leader structure are largely unexplored. Thus, in order to get a more comprehensive picture of how an audit engagement team functions, we investigate the joint role of the audit partner and manager. As prior evidence on the partner-manager dyad is scant, we first examine the dyad formation: how are the audit partners and managers selected and matched? Then we investigate how this match influences the functioning of the audit team.

## **Hypotheses Development**

### ***Dyad Formation***

To derive our predictions, we rely on sociology theory, specifically the theory of homophily (Lawrence & Shah, 2020; McPherson et al., 2001). Homophily, a term first introduced by Lazarsfeld and Merton (1954), describes individuals' natural tendency to associate with individuals who are similar to themselves. Homophily "structures the multiple social systems to which people belong" (Lawrence & Shah, 2020, p. 513). Prior research finds patterns of homophily in all types of relationships. That "birds of a feather flock together" is evident in the closest ties of marriage and friendship, in more distant relationships at work, and even in mere contact with others (McPherson et al., 2001). Psychology research provides evidence for the cognitive processes underlying homophily by showing that attraction is affected by perceived similarity (Huston & Levinger, 1978). In addition, homophily arises due to simple factors such as geography, family ties, or organizational connections.



Researchers have demonstrated the existence of this phenomenon across a number of dimensions. Homophily manifests itself across sociodemographic factors like race, ethnicity, sex, or age (referred to as *status homophily* by Lazarsfeld and Merton (1954), but also across dimensions like behavior patterns, attitudes, skills, and aspirations (referred to as *value homophily* by Lazarsfeld and Merton (1954)). Prior studies that have investigated homophily in dyadic (i.e., two-person) relationships have, for example, looked at marriage (Kalmijn, 1998), friendship (Verbrugge, 1977), but also at dyadic relations within a professional context, such as the relationship between venture capitalist and entrepreneurs (Claes & Vissa, 2020; Gompers, Mukharlyamov, & Xuan, 2016), and different managers (Castilla, 2011). The studies all find patterns consistent with predictions based on homophily.

However, evidence on the audit partner-manager dyad formation is limited. One recent paper by Downar et al. (2021) combines interview evidence with publicly available data from Germany to study the dyad formation at the top of an engagement team. Their study focuses on the dyad of the lead auditor with a concurring (reviewing) auditor. Downar et al. (2021) find that the dyads are similar in terms of their gender and ethnicity, in line with the predictions based on homophily theory. While this study provides evidence of a dyad effect formation at partner review level, it does not examine the audit team leadership dyad. In contrast, we examine the dyad that is leading the engagement team, i.e., the lead partner and the engagement manager because this duo has the largest influence on the team. A concurring review partner only reviews the completed audit work at the end of the engagement and mostly interacts with the lead partner rather than the team.

Thus, we focus on the partners' and managers' skills and leadership behavior. These factors are more relevant to our setting than sociodemographic because psychology research provides evidence that skills and leadership are more predictive of behavior and thus have a larger potential effect on the team (e.g., Ajzen, 1991).

In line with homophily theory, we argue that audit partner-manager dyads are more likely to be formed among individuals who have a similar working style, as represented by their skills and leadership behavior. When given a choice, partners and managers will select themselves into a working relationship with similar others for ease of communication and other features that smooth the coordination of activity (McPherson et al., 2001). Hence, given the prevalence of homophily in all different types of relationships and the consistent patterns, we expect to observe homophily in the dyad formation. This leads us to formulate the following hypothesis.

***H1:** Audit partners and managers who form a dyad are, on average, more similar than partners and managers who do not form a dyad.*

This hypothesis is not without tension. Even though anecdotal evidence suggests that partners have some freedom in selecting their engagement manager, the audit firms might either have constraints in place that limit the choice of engagement manager (e.g., availability, expertise, seniority) or assign a dyad based on some criteria (e.g., complementary abilities). The potential restrictions imposed by the audit firm would limit the impact of homophily and result in less similar dyads.

### ***Dyadic Fit and Audit Team Functioning***

The second research question examines if similarity of the dyad affects the functioning of the engagement team. On the one hand, homophily theory suggests, and prior empirical studies provide evidence, that being similar results in affective closeness (Oelberger, 2019), interpersonal trust (Ahlf et al., 2019), and more frequent communication (Reagans, 2005). Being similar can further help to establish a mutual understanding (Downar et al., 2021). Taken together, these positive effects should facilitate the cooperation between the members of the dyad, which is needed in a dual-leader structure. In such a structure, it is important that both

leaders communicate and coordinate their behavior to ensure that all team members are on the same page regarding team objectives. Following this argumentation, the similarity between the members of the dyad could have a positive influence on the functioning of the team.

On the other hand, similarity could negatively affect the dyad by strengthening biases (Ertug et al., 2022) or fostering groupthink (Janis, 2008). Specifically, when making decisions, dyad members might rely on the (perceived) similarity rather than the actual underlying ability of the dyad partner, a process referred to as attribute substitution (Tversky & Kahneman, 1974). Moreover, increased communication and affective closeness within the dyad might not automatically translate into a better functioning team if the leaders do not know how to communicate with other team members or if they lack general leadership abilities. Therefore, the direction of how dyadic similarity or fit influences the functioning of the team is not clear *ex ante*. Hence, we state our second hypothesis in non-directional form:

*H2: Audit partner-manager dyadic fit influences the functioning of the audit engagement team.*

### **III. SAMPLE AND DATA COLLECTION**

#### **Data Collection**

Following the approval from our Institutional Review Board, we recruited survey participants from ten audit firms (the Big 4 and six medium-sized firms) via the Foundation for Auditing Research in the Netherlands. To test our predictions, we require data about the partner-manager dyad and the functioning of the audit team. Therefore, we administered two separate surveys: in one survey, team members assessed the skills and leadership behavior of both the partner and manager on one engagement (hereinafter referred to as leader-survey), and

the other survey focuses on team dynamics and functioning within the audit team on the same engagement (hereinafter referred to as team-survey).<sup>1</sup>

The sample for both surveys is based on a sampling process. We followed a systematic random sampling approach to ensure a representative sample. The starting point was a list of all engagement partners, and then after a random start, one-third of all partners were selected for participation in our study.<sup>2</sup> For the selected partners, the audit firms then selected two engagements that fulfill the sampling criteria of our study (min. 250 audit hours, variety of industries, smaller and larger clients, and a mix of PIE and private clients). The selection of engagements, including all team members, their positions, and hours spent on the client, was then shared with the research team (in anonymized form). This allowed us to identify the partner-manager dyad and the core team members who would participate in the surveys.<sup>3</sup> We categorize a team member as a core team member if they spent at least 20h on the engagement and if they were audit personnel rather than specialists or consultants. These criteria were put in place to ensure that team members can actually assess the dyad and team dynamics.

Following our selection, all team members (including partners and managers) received invitations to participate in the two online survey windows. Depending on the firm, participants had between three to six weeks to complete the survey, with one reminder sent after two weeks. In addition to the reminder, the leadership of the different audit firms introduced the survey to increase participation. The surveys were sent out on a rolling basis following the completion

---

<sup>1</sup> In addition to the survey data, the audit firms deliver internal audit firm data about all team members and engagements. As the data collection process is tedious and still ongoing, the data is currently not included in the analyses in this draft.

<sup>2</sup> In the European Union, all audit opinions are signed with the name of the individual who is ultimately in charge of the engagement. We refer to this individual as audit partner, but we include all function levels who are designated by the audit firm to legally sign the audit opinion; this includes equity partners, but also directors or salary partners. Similarly, “engagement manager” includes both senior managers and managers.

<sup>3</sup> In case multiple (senior) managers work on one engagement, we selected the manager most central to the team, i.e., the one who spent *most* hours on the engagement and/or was indicated by the audit firm as the responsible engagement manager.

of the audit engagement to reduce the time window between the sign-off of the engagement and the completion of the survey to reduce potential recall bias.

In total, we collected 2,336 responses on the leader-survey for 661 unique leaders on 381 engagements. For the team-survey, we gathered 1,287 responses for 380 engagements.

### **Sample Construction**

Based on the survey responses, we construct the sample for our study. The focus of the study is the partner-manager dyad. To have a meaningful assessment of the leader, we require at least three survey responses per leader. Thus, in order for a dyad to be included in this study, both partner and manager need to have at least three observer ratings. This reduces the sample from 381 engagements to 223 engagements. For our first analyses (see Section IV), we further require the office location for each leader, which is provided by the audit firm's internal data. As the data collection is currently still ongoing, the data is only available for seven out of ten firms, which further reduces the sample to 211 engagements with 199 unique dyads. Thus, 12 dyads work on two engagements. The dyads consist in total of 154 partners (mean = 6.14 raters) and 172 managers (mean = 4.57 raters). Table 1, Panel A presents some descriptive statistics for the leaders. Partners are, on average, 46.3 years old (SD = 6.13) with a mean firm tenure of 19.1 years (SD = 9.34), and 13.6 percent are female. The managers in our sample have an average age of 35.4 years (SD = 6.68), a mean firm tenure of 10.4 years (SD = 7.62), and 26.2 percent are female.

[Insert Table 1, Panel A]

### **Surveys**

The leader-survey measured key constructs related to audit partners' and managers' skill set and their leadership behavior, and the team-survey featured different questions on the team dynamics and functioning of the engagement team. Appendix A includes an overview of all

constructs and survey items. All questions were asked on a 5-point Likert scale. If a construct consists of multiple items, we report Cronbach's alpha as a measure of internal reliability.

**Skills.** We developed a new measurement scale to capture the unique skill set that is required to perform the job of an auditor.<sup>4</sup> The scale is based on the set of skills the Big 4 audit firms use to describe the competencies of their partners and managers (as part of their internal competency mapping). In this study, we focus on the commercial (Cronbach's alpha = 0.84) and technical skills (Cronbach's alpha = 0.81) of an auditor, as assessed by the team.

**Leadership Behavior.** To assess the leadership behavior of the partner and manager, we rely on previously established instruments from the team science literature. The key role of a team leader is to handle the numerous challenges that arise during the different phases of teamwork and to satisfy the team's corresponding needs. Teamwork is "characterized by recurring cycles of mutually dependent interaction" (Morgeson et al., 2010, p.7) and these cycles can be divided into two distinct phases (Marks, Mathieu, & Zaccaro, 2001): transition and action. The transition phase includes planning and evaluation activities to foster goal attainment, whereas the action phases contains the actual work activities to accomplish the team's goal. The needs that arise in each phase are distinct and a good leader recognizes these needs, and implements different leadership behaviors in each phase.<sup>5</sup> We include six questions to capture a leader's transition behavior, and ten questions for action behavior. These questions are based on Morgeson et al. (2010). Cronbach's alpha is 0.91 for Action Behavior, and 0.87 for Transition Behavior. Correlation and factor analyses on our data, however, suggest that the two behaviors are highly correlated ( $r = 0.94$ ), and one factor explains 95 percent of the variation. Thus, we combine the two leadership behaviors into one overall leadership factor. A

---

<sup>4</sup> The scale is validated and tested in a concurrent working paper by Pieper (2022). This paper examines how personality characteristics of auditors are associated with the different skills of auditors and the audit firm's assessment of their individual job performance.

<sup>5</sup> For example, during the transition phase, a team needs to set goals and establish a shared understanding within the team. Hence, a good leader will clarify team objectives, provide a clear vision, and set the tone.

higher score on this factor implies that the partner or manager implemented leadership behaviors more frequently (see Appendix A).

**Psychological Safety.** Given the importance speaking up and sharing information, especially by junior team members, psychological safety is an important aspect of the team climate (e.g., Gissel & Johnstone, 2017; Nelson et al., 2016; Proell et al., 2022). We use a six-question construct (Cronbach's alpha = 0.84) adapted from Edmondson (1999).

**Team Commitment.** A key antecedent of team performance is affective commitment to the team (Pearce & Herbik, 2004), which implies that team members are committed to a common goal and work towards this goal together. We use a five-item construct by Kirkman and Rosen (1999).

**Team Identity.** In order to form a team, rather than being a simple work group, individuals need to identify with the team and share a feeling of pride when working in the team. We adapt a three-item construct (Cronbach's alpha = 0.69) by Kirkman and Rosen (1999).

**Team Performance.** We asked all team members to assess how well the audit engagement team performed overall. The self-reported measure is a five-item construct (Cronbach's alpha = 0.84) by Kirkman and Rosen (1999).

The final score for each leader and team is the average of all responses received. We require at least three ratings per leader and per team to have a reliable score.

#### IV. TEST OF H1

##### Research Design H1

To show that the actual formed dyads are more similar than randomly matched dyads (H1), we follow an approach similar to prior studies (e.g., Downar et al., 2021; Francis, Golshan, & Hallman, 2022; Gompers et al., 2016). In particular, we create counterfactual dyads, i.e., the dyad matches that *could* have been formed ex ante but did not occur. To do so, we pair the actual audit partner with all available managers within an audit firm's *region*. Given the small

geographic distances within the Netherlands, we observe that 41 percent of the dyads in our sample are not located in the same office but within the same geographic region. Hence, we consider all managers within a firm-specific region as possible matches for the engagement partner. The matching procedure results in 2,000 dyads, out of which 199 are *actual* dyads (i.e., actual engagement partner and manager) within our sample.<sup>6</sup>

We estimate a probit regression model to test our prediction. The dependent variable, *Actual Dyad*, is equal to one for the actual partner-manager dyads and zero for the counterfactual dyads. The empirical model is specified as follows:

$$P(\text{Actual Dyad}) = \alpha + \beta_1 \text{Similarity Commercial Skills} + \beta_2 \text{Similarity Technical Skills} + \beta_3 \text{Similarity Leadership} + \gamma \text{Controls} + \varepsilon \quad (1)$$

The main variables of interest are the three similarity variables, which are captured by the absolute difference between the partner's and manager's scores on each dimension, and then multiplied by  $-1$  to reflect a similarity score rather than the difference. Based on our first hypothesis, we expect the estimates of  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  to be positive and significant.

We include several control variables in our model: We include an indicator variable for whether the dyad members share the same gender to control for this source of homophily (Downar et al., 2021). We further control for the dyad being in the same office, as the descriptive statistics reveal that a majority is formed within an office (59 percent). We also include measures on the team's familiarity with the leader and control for potential firm-specific differences in matching practices. Appendix B includes all variable definitions.

The counterfactual analysis provides us with a first indication of who works together and whether audit partners and managers within a dyad are similar. However, a similar score could result either from both auditors scoring high on a specific dimension or low. In addition, the

---

<sup>6</sup> We do not have a complete list with all the engagements each partner and manager works on. We have maximum two engagements per partner in our data set. Thus, it is possible that a partner works with a manager on a different engagement not included in our sample. That is, we would falsely classify an actual dyad as a counterfactual dyad. However, this only biases against us finding significant relations.



counterfactual analysis does not show whether a trade-off exists between dimensions. For example, a specific dyad might score similarly high on technical skills and similarly low on leadership behavior. Thus, to get a better understanding of the *overall* profiles of the dyad members, we implement a k-means clustering approach. This method takes all three dimensions into consideration simultaneously and aggregates individual data points together because of similarities across all dimensions. We use this algorithm to categorize the profile of every partner and manager, and then we investigate whether dyads are formed within or across clusters. Following our first hypothesis, we expect that dyads are more likely formed *within* a cluster.

## **Results H1**

An implicit assumption underlying our first hypothesis is that partners have some freedom in choosing their engagement partner. The descriptive statistics confirm this assumption for our sample. For 123 out of 211 teams, we know how the dyad was formed. In particular, the engagement partner selected the manager in 68% of all cases. The rest were assigned by the firm, either with or without consulting the partner. The descriptives in Table 1, Panel B give a first indication that the dyad members tend to be similar in terms of their technical (mean similarity = -0.404) and commercial skills (mean similarity = -0.387), as well as leadership behavior (mean similarity = -0.383).

[Insert Table 1, Panel B]

Table 2 presents the results of the counterfactual analysis. We find significant and positive coefficients for all three variables of interest (0.275, 0.310, and 0.318 for similarity in commercial skills, technical skills, and leadership behavior, respectively). This suggests that the actual dyads are more similar than the randomly matched counterfactuals that were created based on the overall available pool of engagement managers. Thus, similarity increases the likelihood that an actual dyad is formed. This pattern is consistent with the theory of homophily

and therefore supports our first hypothesis. In addition, being in the same office increases the likelihood of a partner and manager being matched, which matches the pattern that the majority of dyads (59 percent of our sample) are formed within an audit office. In contrast to Downar et al. (2021), sharing the same gender does not increase the likelihood of dyad formation.

In an untabulated mean comparison, we compare the similarity scores of the dyads that were assigned by the audit firm versus the ones where the partner selected the manager. We do not find a statistical difference between the two groups, which suggests that dyads assigned by the firm are also similar in their skills and leadership behavior.

[Insert Table 2]

Next, we perform the k-means cluster analysis. This method suggests the existence of three unique clusters, i.e., there are three distinct leader profiles. Figure 1 details a visual representation of the three clusters, and Table 3, Panel A, provides summary statistics for each cluster.

[Insert Figure 1]

Individuals in Cluster 1 (dark blue) score significantly below average on each of the three dimensions, whereas individuals in Cluster 2 (pink) score around the average on each of the three dimensions. Leaders in Cluster 3 (turquoise) score significantly higher on all three dimensions. This suggests that there is little variation across these three variables within a leader: either the team members perceive the leader as an above average leader with high commercial and technical skills and implemented the leadership behaviors frequently, or they do not perceive the leader as a good leader and rate her lower on all dimensions.

Next, we look at the dyad formation and whether dyads are more likely formed within or across clusters. Table 3, Panel B presents a frequency table on the dyad formation. The results provide further support for our first hypothesis because dyads are significantly more likely to be formed *within* a cluster (52 percent).

[Insert Table 3]

In summary, the results from both the counterfactual analysis and cluster analysis are in line with our prediction. Audit partner-manager dyads appear to be similar in terms of their working style, as reflected in their skills and leadership behavior.

## V. TEST OF H2

### Research Design

To test how the formed dyad influences the functioning of the team, we use the preceding cluster analyses to classify each dyad. In particular, we are interested in whether a similar dyadic fit (i.e., supplementary) or a dissimilar fit (i.e., complementary) improves the functioning of the team. We classify a dyad as supplementary when both dyad members are in the same cluster and as complementary when they are in different clusters. For the supplementary dyads, we identify the cluster the leaders belong to, which results in three supplementary dyad categories: *Supplements Low*, *Supplements Avg*, and *Supplements High*. As the complementary dyads are in different clusters, we distinguish which leader (partner or manager) is rated higher. Hence, there are two complementary dyad categories: *Complements Partner High Manager Low* and *Complements Partner Low Manager High*. Figure 2 provides an overview of the dyad classifications.

[Insert Figure 2]

We merge the leader-survey with the team-survey to obtain the different outcome variables. This reduces the sample size to 178 engagement teams, for which we have at least three team member ratings (mean = 4.65 raters) . To test how the formed dyad influences the functioning of the engagement team, we estimate the following OLS Model:

$$Team\ Outcomes = \alpha + \beta * Dyad\ Type + \gamma Controls + \varepsilon, \quad (2)$$

where *Team Outcomes* is one of the four team-assessed outcome variables (*Psychological Safety*, *Team Identity*, *Team Commitment*, or *Team Performance*) and *Dyad Type* reflects the

five different dyad categories as classified above. *Supplements Low* serves as the baseline. We include controls for *Same Office*, *Same Gender*, and the audit firm.

## Results H2

Table 4 presents descriptive statistics and correlations for the different outcome variables and the similarity measures of the dyad. Based on the correlation matrix, there is no relation between the different similarity measures and the team outcomes. However, the similarity measures do not differentiate between a high degree of similarity resulting from weak or strong performing dyads. Thus, we turn to the main analyses that used the dyad types rather than the raw similarity scores.

[Insert Table 4]

Table 5 presents the results of Model 2. The results are consistent across the different team outcome measures and provide evidence of both supplementary and complementary effects. First, a dyad consisting of a similar partner and manager who both possess strong skills and leadership behaviors (*Supplements High*) has the strongest influence on audit team dynamics (psychological safety, team commitment, and team identity) and audit team performance. Second, a strong partner (manager) can compensate a weak (manager) partner, as indicated by the positive and significant coefficients for the two complementary dyads. The complementary dyads also outperform the two other supplementary dyads (*Supplements Average*, and *Supplements Low* [baseline]). The results suggest that rather than matching two individuals who have low or average skills and leadership behaviors, it would be more beneficial for the functioning of the team to create complementary dyads with one stronger leader. We find the lowest levels of team functioning if the dyad consists of two leaders who score below average on skills and leadership. While it might not be surprising that a team with two weaker leaders performs worse, the fact that such a dyad is formed is concerning. Untabulated frequency tables

show that such a dyad is also assigned by the firm and is not only a result of self-selection by the auditors.

Comparing the two types of complementary dyads, we note that for all of the four outcome variables, the coefficient for the dyad with a stronger manager and weaker partner (*Complements Partner Low, Manager High*) is larger than the coefficient of the dyad with a strong partner and weaker manager (*Complements Partner High, Manager Low*). While the difference is not significant at conventional levels, it highlights that the manager seems to play an important role in the functioning of the team.

[Insert Table 5]

Collectively, our findings indicate that dyadic fit influences team functioning. The direction of this relationship depends on the type of dyad: similarity can have a positive influence on the team if the dyad consists of two skilled individuals with high leadership behavior. If one of the dyad members displays average or below average skills and leadership behavior, it is beneficial for the team to pair this dyad member with a stronger leader.

## VI. ADDITIONAL ANALYSIS

The functioning of the dual-leadership structure in an audit team is largely unexplored. Thus, there is no evidence of the relative influence of each of the leaders on the team. We conduct this additional analysis to explore whether one dyad member influences the functioning of the team more strongly. To do so, we regress the different team outcome variables on the skills and leadership behavior of the partner and manager separately. Table 6 presents the results.

[Insert Table 6]

The analysis provides two main insights. First, we note that the team functioning is influenced by the leadership behavior rather than the dyad members' professional and technical

skills. The positive coefficient implies that more frequently implementing leadership behaviors that satisfy the needs of the team ultimately results in a better functioning team, as suggested in the team science literature (e.g., Morgeson et al., 2010).<sup>7</sup> Second, the analysis suggests that both partner and manager influence the team, which emphasizes the importance of studying the dual-leader structure. The partner's leadership behavior influence is largest on *Psychological Safety* (0.062) and *Team Identity* (0.055), whereas the manager's leadership behavior is associated with *Team Commitment* (0.109) and *Team Performance* (0.103). A possible interpretation of this finding is that psychological safety and team identity are elements of a team climate that be initiated top-down, whereas team commitment and performance require continuous attention, which is why the manager, as the daily supervisor, is more important. Overall, the analysis confirms that both the partner' and manager's leadership behavior influences the dynamics in the audit team.

## VII. CONCLUSION

In this study, we address two related research questions. The first question revolves around the formation of the partner-manager dyad that jointly leads the audit engagement team. The second question asks how the formed dyad influences the functioning of the team. We rely on the theory of homophily to formulate our predictions and test those by collecting data via two large-scale surveys. Our sample includes ten audit firms (Big 4 firms and six medium-sized firms) in the Netherlands, and the final sample includes 211 engagement teams and their partner-manager dyads.

We find that partners and managers that form a dyad are, on average, similar in terms of their skills and leadership behavior, regardless of whether the dyad is assigned by the firm, or the partner selected the manager. We further document that similarity can positively affect the

---

<sup>7</sup> We include technical and commercial skills because we expect the skills to influence other engagement-related outcomes, such as efficiency and audit quality. Once the internal firm data is delivered, these outcome variables will be added to the analysis.

team, but only if both partner and manager are above average in skill and demonstrate consistently high leadership. Otherwise, it is better to assign complementary dyads, as a strong partner (manager) can compensate for a weak manager (partner).

These findings can provide audit firms with useful information on how they manage and compose their audit teams. As most audit partners (in our sample, 68 percent) are given the freedom to choose their engagement managers, audit firms should understand the potential consequences of that choice. This could help the firms to achieve their goal of establishing consistent levels of audit quality across engagements. Our study emphasizes the dual-leadership role of the audit partner and the team: both leaders influence the functioning of the team. The audit standards and (internal) quality reviews largely focus on the audit partner, as the leader who is ultimately responsible for the engagement, and do not pay as much attention to the responsible engagement manager. Our findings suggest that more carefully matching audit partners and managers can positively influence the functioning of the audit engagement team, which should ultimately increase audit efficiency and effectiveness.

Our study is subject to some limitations. We focus on engagement team dynamics as outcome measures. While we assume that a better functioning team will ultimately conduct a higher quality audit, this assumption needs to be validated in future analyses using actual audit outcomes. We also rely on team members' ratings for the skills and leadership abilities of the partner and manager. Even though observer ratings are frequently used in the OB and psychology literature, we cannot rule out that the assessments are potentially not reflective of the true abilities of the dyad members.

## References

- Ahlf, H., Horak, S., Klein, A., & Yoon, S.-W. (2019). Demographic homophily, communication and trust in intra-organizational business relationships. *Journal of Business & Industrial Marketing*.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Cameran, M., Ditillo, A., & Pettinicchio, A. (2018). Audit team attributes matter: How diversity affects audit quality. *European Accounting Review*, 27(4), 595-621.
- Castilla, E. J. (2011). Bringing managers back in: Managerial influences on workplace inequality. *American Sociological Review*, 76(5), 667-694.
- Claes, K., & Vissa, B. (2020). Does social similarity pay off? Homophily and venture capitalists' deal valuation, downside risk protection, and financial returns in India. *Organization Science*, 31(3), 576-603.
- Dennis, S. A., & Johnstone, K. M. (2018). A natural field experiment examining the joint role of audit partner leadership and subordinates' knowledge in fraud brainstorming. *Accounting, Organizations and Society*, 66, 14-28.
- Downar, B., Ernstberger, J., & Koch, C. (2021). Determinants and consequences of auditor dyad formation at the top level of audit teams. *Accounting, Organizations and Society*, 89, 101156.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative science quarterly*, 44(2), 350-383.
- Ertug, G., Brennecke, J., Kovács, B., & Zou, T. (2022). What does homophily do? A review of the consequences of homophily. *Academy of Management Annals*, 16(1), 38-69.
- Francis, J. R., Golshan, N., & Hallman, N. J. (2022). Does distance matter? An investigation of partners who audit distant clients and the effects on audit quality. *Contemporary Accounting Research*, 39(2), 947-981.
- Gissel, J. L., & Johnstone, K. M. (2017). Information sharing during auditors' fraud brainstorming: Effects of psychological safety and auditor knowledge. *Auditing: A Journal of Practice & Theory*, 36(2), 87-110.
- Gold, A., Gronewold, U., & Salterio, S. E. (2014). Error management in audit firms: Error climate, type, and originator. *The Accounting Review*, 89(1), 303-330.
- Gompers, P. A., Mukharlyamov, V., & Xuan, Y. (2016). The cost of friendship. *Journal of Financial Economics*, 119(3), 626-644.
- Hossain, S., Yazawa, K., & Monroe, G. S. (2017). The relationship between audit team composition, audit fees, and quality. *Auditing: A Journal of Practice & Theory*, 36(3), 115-135.
- Huston, T. L., & Levinger, G. (1978). Interpersonal attraction and relationships. *Annual Review of Psychology*, 29(1), 115-156.
- IAASB. (2020). Quality Management for an Audit of Financial Statements. In *ISA 220 (Revised)*.
- Janis, I. L. (2008). Groupthink. *IEEE Engineering Management Review*, 36(1), 36.
- Jiambalvo, J., & Pratt, J. (1982). Task complexity and leadership effectiveness in CPA firms. *Accounting Review*, 734-750.
- Kadous, K., Proell, C. A., Rich, J., & Zhou, Y. (2019). It goes without saying: The effects of intrinsic motivational orientation, leadership emphasis of intrinsic goals, and audit issue ambiguity on speaking up. *Contemporary Accounting Research*, 36(4), 2113-2141.
- Kalmijn, M. (1998). Inter marriage and homogamy: Causes, patterns, trends. *Annual review of sociology*, 395-421.



- Kirkman, B. L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management journal*, 42(1), 58-74.
- Lawrence, B. S., & Shah, N. P. (2020). Homophily: Measures and meaning. *Academy of Management Annals*, 14(2), 513-597.
- Lazarsfeld, P. F., & Merton, R. K. (1954). Friendship as a social process: A substantive and methodological analysis. *Freedom and control in modern society*, 18(1), 18-66.
- Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. *Academy of management review*, 26(3), 356-376.
- McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual review of sociology*, 415-444.
- Morgeson, F. P., DeRue, D. S., & Karam, E. P. (2010). Leadership in teams: A functional approach to understanding leadership structures and processes. *Journal of management*, 36(1), 5-39.
- Nelson, M. W., Proell, C. A., & Randel, A. E. (2016). Team-oriented leadership and auditors' willingness to raise audit issues. *The Accounting Review*, 91(6), 1781-1805.
- Oelberger, C. R. (2019). The dark side of deeply meaningful work: Work-relationship turmoil and the moderating role of occupational value homophily. *Journal of Management Studies*, 56(3), 558-588.
- PCAOB. (2010). Supervision of the Audit Engagement. In *Auditing Standard No. 10*. Washington, DC: PCAOB.
- Pearce, C. L., & Herbik, P. A. (2004). Citizenship behavior at the team level of analysis: The effects of team leadership, team commitment, perceived team support, and team size. *The Journal of Social Psychology*, 144(3), 293-310.
- Pieper, L. (2022). *The Effects of Personality on Skills and Job Performance of Experienced Auditors*. Working Paper.
- Pratt, J., & Jiambalvo, J. (1981). Relationships between leader behaviors and audit team performance. *Accounting, Organizations and Society*, 6(2), 133-142.
- Proell, C. A., Zhou, Y. D., & Nelson, M. W. (2022). It's Not Only What You Say... How Communication Style and Team Culture Affect Audit Issue Follow-Up and Auditor Performance Evaluations. *The Accounting Review*, 97(2), 373-395.
- Reagans, R. (2005). Preferences, identity, and competition: Predicting tie strength from demographic data. *Management science*, 51(9), 1374-1383.
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases: Biases in judgments reveal some heuristics of thinking under uncertainty. *science*, 185(4157), 1124-1131.
- Verbrugge, L. M. (1977). The structure of adult friendship choices. *Social forces*, 56(2), 576-

## Appendix A: Survey Items

---

### Leader-Survey

---

*All items were assessed on a 1-5 Likert scale.*

#### Skills

*Respondents were asked to assess the level of skills demonstrated by the partner/manager. 1 = Needs improvement, 2 = Just below expectations, 3 = meets expectations, 4 = Exceeds expectations, 5 = Outstanding.*

*The Partner/Manager.*

#### Commercial Skills (Cronbach's alpha = 0.84 )

Establishes and maintains relevant networks/markets and acquires future sales and business.

Contributes to organizational image, represents the firm to clients and in the public debate, participates in community and social affairs.

Manages client relationships and builds a portfolio.

Provides exceptional client services and impact.

#### Technical Skills (Cronbach's alpha = 0.81)

Is proficient at technical requirements, knows what it takes to do the job, has recognized expertise.

Effectively manages compliance and risks to the firm.

Understands processes linked to audit engagement effectiveness and is able to deliver a high-quality audit.

#### Leadership Behavior (Cronbach's alpha = 0.93)

*Respondents were asked to describe their partner's (manager's) leadership behavior. 1 = Rarely or never, 2 = Once in a while, 3 = Sometimes, 4 = Fairly Often, 5 = Very frequently or always.*

*I believe this [partner/manager] implemented the following behaviors:*

Defining the mission. Clarifies team objectives, provides a clear vision and sets the tone.

Establishing expectations and goals. Sets and communicates challenging yet realistic goals.

Structuring and planning. Assigns tasks, roles and responsibilities, and coordinates team activities.

Training and developing. Provides interpersonal, problem solving and audit skill development.

Providing feedback. Gives constructive feedback on performance relative to standards and results.

Sensemaking. Helps to understand and makes sense of events, trends, and changes.

Monitoring operations. Checks on progress, considers problems toward individual or team success.

Managing resources. Obtains and allocates people, expertise and other resources.

Challenging the team. Suggests new ways of doing things, questions assumptions and status quo.

Solving problems. Seeks multiple perspectives and encourages participation to solve problems.

Supporting the social climate. Provides encouragement and support, looks out for team members.

Encouraging collaboration. Emphasizes the use of teamwork, deals with conflicts and disagreements.

Building relationships with clients. Timely discussions of audit progress and problems with clients.

Recognizing praise and performance. Gives recognition and links rewards to effective performance.

Resolving conflicts. Encourages constructive and collaborative problem solving, defuses conflict.

Communicating clearly. Communicates information in an open, articulate, confident manner.

---

### **Team – Survey**

---

*All items were assessed on a 1-5 Likert scale. 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree*

#### **Psychological Safety (Cronbach's alpha = 0.84)**

I believe the members of this audit engagement team:

- Respect one another
- Are able to bring up problems and tough issues with other.
- Make each other feel valued.
- Are encouraged to ask other members for help.
- Share and accept constructive criticism without making it personal.
- No one on this team would deliberately act in a way what would undermine anyone else's work.

#### **Team Commitment (Cronbach's alpha = 0.83)**

I believe the members of this audit engagement team:

- Are all committed to our team.
- Find that their values and the team's values are very similar.
- Really care about the fate of this team.
- Believe that this is the best of all possible teams for which to work.
- My team really inspires the very best from its members in the way of job performance.

#### **Team Identity (Cronbach's alpha = 0.69)**

Please rate your agreement with each statement:

- I feel great pride when my team does well, even if I'm not the main reason for its success.
- The successes of my team are my successes too.
- When someone praises my collaboration with this team, it feels like a personal compliment.

#### **Team Performance (Cronbach's alpha = 0.84)**

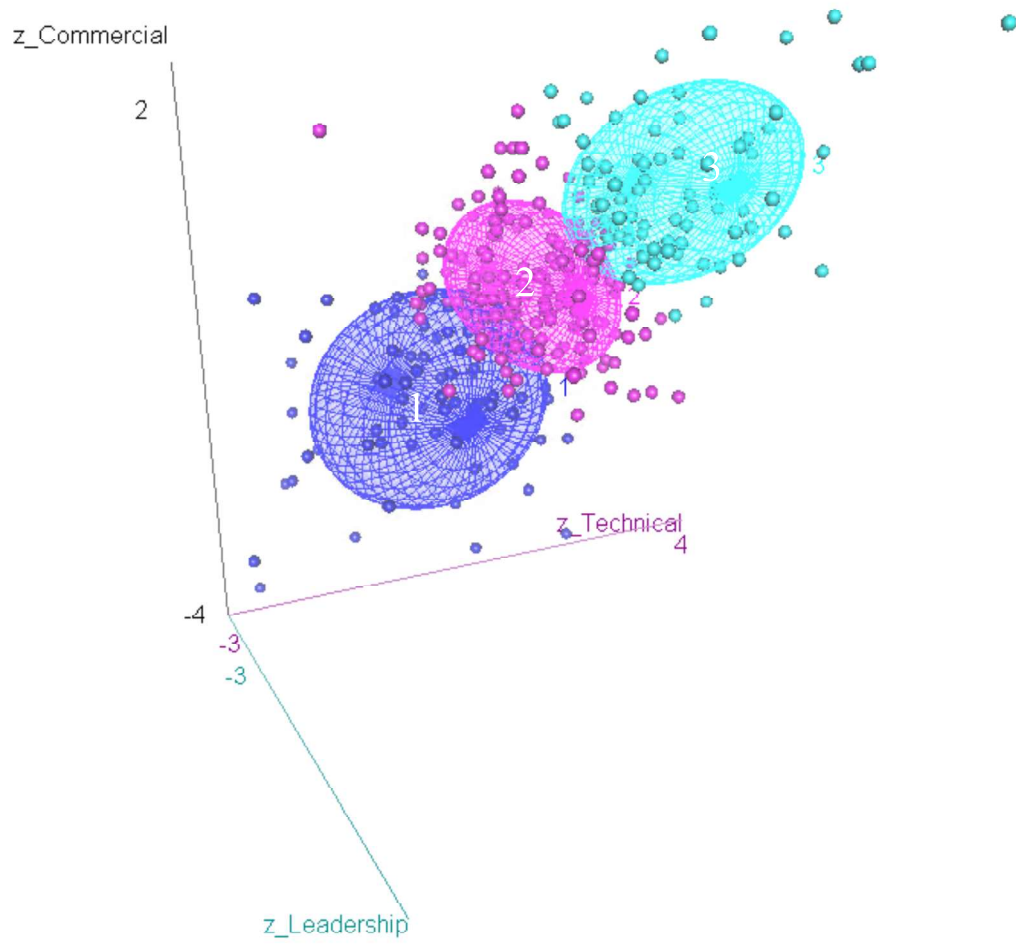
I believe my audit engagement team:

- Meets or exceeds its goals.
- Completes its tasks on time.
- Makes sure that audit services meet or exceed service standards.
- Responds quickly when problems come up.
- Is a productive team.

## Appendix B: Variable Descriptions

Variable	Description
<i>Observed-assessed attributes of the leader</i>	
<i>Scale 1 - 5</i>	
Commercial Skill	Skill factor capturing the auditor's capability to establish, maintain networks, generate revenue, manage client relationships, and build a portfolio, represent the audit firm. Assessed by at least three team members. The final score is the average of all ratings.
Technical Skill	Skill factor capturing the auditor's capability to provide high quality audit services, manage risks and compliance, and being technical proficient. Assessed by at least three team members. The final score is the average of all ratings.
Leadership	Leadership factor capturing how frequently the auditor implemented the different action and transition leadership behaviors. Assessed by at least three team members. The final score is the average of all ratings.
<i>Similarity between leaders</i>	
Similarity Commercial Skills	(  Commercial Skill Partner - Commercial Skill Manager ) * (-1)
Similarity Technical Skills	(  Technical Skill Partner - Technical Skill Manager ) * (-1)
Similarity Leadership	(  Leadership Partner - Leadership Manager ) * (-1)
Same Gender	1 if both partner and manager share the same gender, 0 otherwise.
Same Office	1 if both partner and manager are located in the same office, 0 otherwise.
<i>Dyad Types</i>	
Complement Partner High Manager Low	The dyad falls in this category, if the dyad members are in different clusters <u>and</u> the partner's rating exceeds the manager's rating.
Complement Partner Low Manager High	The dyad falls in this category, if the dyad members are in different clusters <u>and</u> the manager's rating exceeds the partner's rating.
Supplements Low	The dyad falls in this category, if both partner and manager are in Cluster 1 (i.e., their rating is below average on both skills and leadership). This type serves as baseline in Model 2.
Supplements Average	The dyad falls in this category, if both partner and manager are in Cluster 2 (i.e., their rating is average on both skills and leadership.)
Supplements High	The dyad falls in this category, if both partner and manager are in Cluster 3 (i.e., their rating is above average on both skills and leadership.)
<i>Controls</i>	
Familiarity Partner	Team's average familiarity score with the partner (how well do they know the partner + do they like the partner, 5 question item).
Familiarity Manager	Team's average familiarity score with the manager (how well do they know the manager + do they like the manager, 5 question item).
Team Size	Number of observations per team
Firm	Indicator variable for each firm in the sample.
Female	1 if the auditor is female, 0 otherwise.

**Figure 1: Visual Representation Cluster Analysis**



**Figure 2: Overview – Categorization of Dyads**

		Manager - Cluster		
		1 – Low	2 – Avg	3 - High
Partner - Cluster	1 – Low	Supplementary Low [Baseline] (n = 23)	Complementary Manager > Partner	
	2 – Avg	Complementary	Supplementary Avg (n = 51)	(n = 43)
	3 - High	Partner > Manager (n = 41)		Supplementary High (n = 20)

**Table 1: Descriptive Statistics Sample**

	<b>Partner</b> n = 154		<b>Manager</b> n = 172		<b>Overall</b> n = 326	
	Mean	SD	Mean	SD	Mean	SD
Commercial Skills	3.48	0.370	3.27	0.447	3.37	0.425
Technical Skills	3.53	0.373	3.61	0.483	3.57	0.436
Leadership	3.54	0.378	3.75	0.407	3.65	0.407
Female	0.136		0.262		0.202	
Age	46.3	6.13	35.4	6.68	40.5	8.40
Firm Tenure	19.1	9.34	10.4	7.62	14.6	9.51
# of Ratings	6.14	2.44	4.57	1.78	5.31	2.25

<b>Unique Dyads</b> n = 199			
	Mean	SD	Max
Similarity Commercial Skills	-0.404	0.316	0.000
Similarity Technical Skills	-0.387	0.294	0.000
Similarity Leadership	-0.383	0.308	0.000
Same Gender	0.698		
Same Office	0.593		

**Table 2:** Counterfactual Analysis – H1

	Dependent Variable	
	P (Actual Dyad)	
	(1)	(2)
Intercept	-1.003***	-0.555
Similarity Commercial Skills	0.275** (0.124)	0.282** (0.129)
Similarity Technical Skills	0.310** (0.126)	0.301** (0.127)
Similarity Leadership	0.318** (0.128)	0.345** (0.139)
Same Gender	0.062 (0.087)	0.06 (0.087)
Same Office	0.355*** (0.081)	0.357*** (0.081)
Familiarity Partner		-0.072 (0.113)
Familiarity Manager		-0.049 (0.112)
<i>Controls</i>		
Firm Controls?	Yes	Yes
Observations	2,000	2,000
AIC	1,206.43	1,209.71

This table presents the results of Model 1. We use a probit regression model to test our first hypothesis. In Column 1, we predict the probability that an actual dyad is formed using the similarity of the dyad in terms of their skills and leadership behavior as main independent variables. We control for the dyad sharing the same gender and being in the same office, as well as for audit firm differences using a firm indicator. In Column 2, we add two additional controls for the team's average familiarity with the respective leader. See Appendix B for exact variable definitions. Standard errors are reported in parentheses below the coefficients, \*\*\*, \*\*, and \* indicate significance at 1%, 5% and 10% level (two-tailed), respectively.



**Table 3:** Results Cluster Analysis*Panel A:* Descriptives Cluster

	<b>Cluster 1</b>		<b>Cluster 2</b>		<b>Cluster 3</b>	
	<i>Dark Blue</i>		<i>Pink</i>		<i>Turquoise</i>	
	n = 76		n = 168		n = 82	
	Mean	SD	Mean	SD	Mean	SD
Commercial Skills	-1.22	0.80	0.06	0.82	1.00	0.80
Technical Skills	-0.94	0.55	-0.12	0.61	1.11	0.65
Leadership	-1.08	0.61	0.02	0.71	0.94	0.59

*Panel B:* Dyad Formation using the Cluster Analysis

		Manager		
		1 – Low	2 – Avg	3 - High
Partner	1 – Low	<b>23</b>	20	4
	2 – Avg	17	<b>58</b>	26
	3 - High	3	26	<b>22</b>

**Table 4: Descriptive Statistics & Correlations**

	Mean	SD	1	2	3	4	5	6	7
1 Psychological Safety	3.96	0.26	<b>1.00</b>						
2 Team Commitment	3.91	0.27	<b>0.77</b>	<b>1.00</b>					
3 Team Identity	3.60	0.38	<b>0.62</b>	<b>0.59</b>	<b>1.00</b>				
4 Team Performance	3.83	0.38	<b>0.63</b>	<b>0.71</b>	<b>0.40</b>	<b>1.00</b>			
5 Similarity Technical Skills	-0.39	0.30	-0.1	-0.09	-0.13	-0.04	<b>1.00</b>		
6 Similarity Commercial Skills	-0.40	0.31	-0.08	-0.09	-0.08	0.00	<b>0.21</b>	<b>1.00</b>	
7 Similarity Leadership	-0.34	0.29	0.00	-0.03	0.01	0.01	<b>0.22</b>	<b>0.15</b>	<b>1.00</b>

This table presents the Pearson correlation coefficients. Significant correlations ( $p < 0.01$ ) in **bold**. As the dyad types, the key independent variables of interest for H2, are categorical, they are missing from this output.

**Table 5: Regression Results H2**

	Dependent Variable			
	Psychological Safety (1)	Team Commitment (2)	Team Identity (3)	Team Performance (4)
Intercept	3.790*** (0.085)	3.195*** (0.122)	3.688*** (0.085)	3.425*** (0.120)
Complements Partner High Manager Low	0.171*** (0.065)	0.364*** (0.093)	0.239*** (0.065)	0.402*** (0.092)
Complements Partner Low Manager High	0.225** (0.065)	0.414*** (0.092)	0.256*** (0.065)	0.424*** (0.088)
Supplements Average	0.065 (0.063)	0.203** (0.089)	0.109* (0.063)	0.320*** (0.088)
Supplements High	0.309*** (0.076)	0.591*** (0.108)	0.424*** (0.076)	0.602*** (0.107)
Same Office	0.013 (0.038)	0.022 (0.054)	-0.0002 (0.038)	0.018 (0.053)
Same Gender	-0.002 (0.042)	0.047 (0.059)	0.016 (0.042)	0.126** (0.058)
Team Size	0.005 (0.012)	0.012 (0.017)	0.003 (0.012)	-0.011 (0.017)
<i>Firm Controls?</i>	Yes	Yes	Yes	Yes
Observations	178	178	178	178
Adj. R2	0.102	0.157	0.161	0.154
F-Statistic (df = 7; 170)	3.864***	5.709***	5.860***	5.593***

This table presents the results of Model 2. We rely on an OLS regression model to test our second hypothesis. We report results for four dependent variables, all assessed by the audit team members: (1) Psychological Safety, (2) Team Commitment, (3) Team Identity, and (4) Team Performance. We control for the dyad sharing the same gender, being in the same office, the team size, and control for audit firm differences using a firm indicator. See Appendix B for exact variable definitions. Standard errors are reported in parentheses below the coefficients, \*\*\*, \*\*, and \* indicate significance at 1%, 5% and 10% level (two-tailed), respectively.

**Table 6:** Additional Analysis: Individual Leaders - Team Dynamics

	Dependent Variable			
	Psychological Safety (1)	Team Commitment (2)	Team Identity (3)	Team Performance (4)
Intercept	3.872*** (0.070)	3.499*** (0.099)	3.855*** (0.073)	3.890*** (0.096)
Commercial Skills Partner	-0.038 (0.024)	-0.008 (0.034)	-0.007 (0.025)	0.048 (0.033)
Commercial Skills Manager	0.045 (0.028)	0.049 (0.040)	0.066** (0.029)	0.044 (0.038)
Technical Skills Partner	0.032 (0.024)	0.05 (0.035)	0.04 (0.026)	0.028 (0.034)
Technical Skills Manager	-0.006 (0.076)	-0.046 (0.036)	-0.031 (0.026)	-0.023 (0.034)
Leadership Partner	0.062** (0.026)	0.070* (0.038)	0.055** (0.028)	0.061 (0.036)
Leadership Manager	0.047* (0.028)	0.109*** (0.040)	0.18 (0.059)	0.103** (0.039)
Female Partner	0.067 (0.056)	0.019 (0.080)	0.021 (0.045)	0.097 (0.078)
Female Manager	0.009 (0.043)	-0.030 (0.061)	-0.009 (0.039)	-0.087 (0.059)
Same Office	0.003 (0.037)	0.007 (0.053)	-0.009 (0.039)	0.034 (0.051)
Team Size	0.005 (0.012)	0.019 (0.017)	0.004 (0.013)	0.0001 (0.017)
<i>Firm Control?</i>	Yes	Yes	Yes	Yes
Observations	178	178	178	178
Adj. R2	0.204	0.251	0.175	0.279
F-Statistic (df = 7; 170)	3.864***	5.709***	5.860***	5.593***

This table presents the results from our additional analysis. We use this analysis to examine the influence of each leader separately. We report results for four dependent variables, all assessed by the audit team members: (1) Psychological Safety, (2) Team Commitment, (3) Team Identity, and (4) Team Performance. We control for the dyad sharing the same gender, being in the same office, the team size, and control for audit firm differences using a firm indicator. See Appendix B for exact variable definitions. Standard errors are reported in parentheses below the coefficients. \*\*\*, \*\*, and \* indicate significance at 1%, 5% and 10% level (two-tailed), respectively.